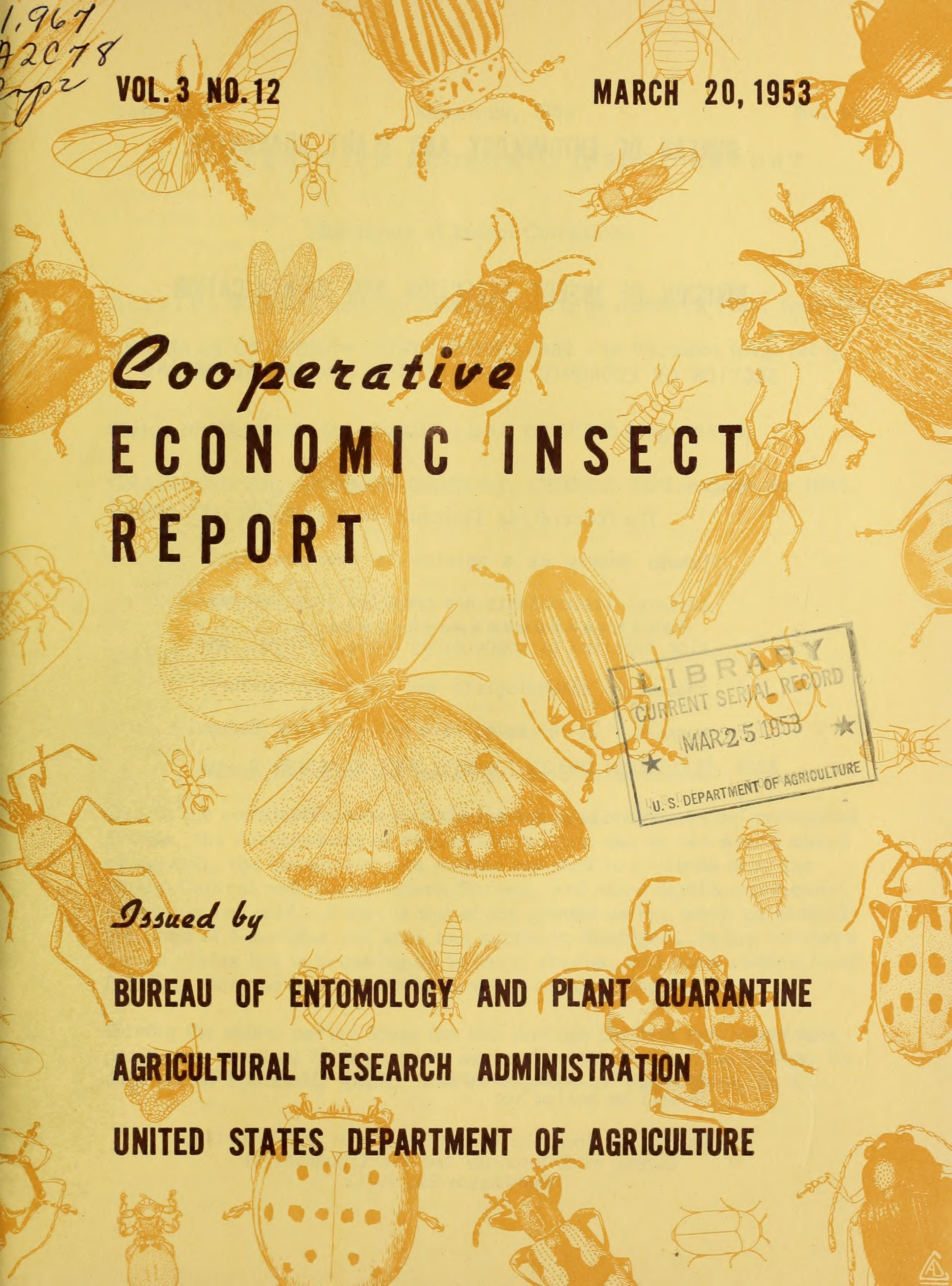
Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

1.967
A2C78
Cop 2



VOL. 3 NO. 12 MARCH 20, 1953

Cooperative
ECONOMIC INSECT REPORT

LIBRARY
CURRENT SERIAL RECORD
★ MAR 25 1953 ★
U. S. DEPARTMENT OF AGRICULTURE

Issued by

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
AGRICULTURAL RESEARCH ADMINISTRATION
UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

DIVISION OF INSECT DETECTION AND IDENTIFICATION

SECTION OF ECONOMIC INSECT DETECTION AND REPORTING

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Bureau serves as a clearing house and does not assume responsibility for accuracy of the material.

Reports and inquiries pertaining to this release should be mailed to:

Section of Economic Insect Detection and Reporting
Bureau of Entomology and Plant Quarantine
Washington 25, D. C.

Volume 3 March 20, 1953 No. 12

COOPERATIVE ECONOMIC INSECT REPORT

Highlights of Insect Conditions

ALFALFA WEEVIL activity unusually early in northern Utah. (page189)

SUMMARY OF INSECT CONDITIONS - 1952 - in Vermont (page 191), South Carolina (page 192).

Status of YELLOW-MARGINED LEAF BEETLE (page 194).

GRASSHOPPER, MORMON CRICKET, CHINCH BUG outlook for 1953. (pages 196 , 197).

****

WEATHER FOR THE WEEK ENDING MARCH 17, 1953

Due to the continual unseasonably mild weather east of the Continental Divide, the development of vegetation is from one to two weeks ahead of normal, the snowcover has mostly receded to sections near the North-Central and Northeastern Border, and snow depths were considerably reduced. Frost is out of the ground as far north as central portions of Nebraska and Iowa and southern Michigan. In the northern Great Plains ice is breaking up in many rivers, and jams caused local flooding along several streams in western South Dakota.

During the warm period from the 11th through the 14th maximum temperatures reached 70 degrees at several points in the Ohio Valley, 64 degrees at Ypsilanti, Mich., and 70 degrees at Washington, D. C.

No freezes occurred in the Southern States, while subzero minima were limited to northern sections of New England and New York at the beginning of the period and to a few points along the north Central Border on the 16th. Average temperatures for the week generally ranged from 5 degrees to 10 degrees above normal, except about normal in Maine and 1 degree to 4 degrees below normal in most sections of the Pacific States and western Nevada. In the Sacramento Valley of California, weekly temperatures averaged 4 degrees below normal and freezing on several nights necessitated orchard heating.

East of the Great Plains moderate to heavy precipitation was general on the 11th, 12th, 14th, and 15th. These rains kept soils too wet to work but with the additional effect of abnormally high temperatures stimulated rapid growth of vegetation. Reports from some southern sections indicate that grass and weed growth was comparable to growth in summer time. Precipitation for the week exceed an inch from eastern portions of Oklahoma and Texas eastward to the coastal plains of Georgia and thence northward over the region east of the Appalachians, and ranged from one-half inch to over an inch in the Great Lakes Region, upper Mississippi Valley, and central South Dakota. A snowstorm in the Dakotas on the 14th left 4 to 6 inches of snow on the ground in central portions of these States. From the western Great Plains to the Pacific Coast, precipitation totals generally were less than one-fourth inch except for 1- to 3- inch totals along the north Pacific Coast. In the Western Plains and far Southwest moisture generally ranged from none to a few hundredths. More moisture is badly needed in the Western Plains where blowing dust on the 14th caused some damage to small grains where the surface was dry.

On the 12th and 13th severe local winds and scattered tornadoes swept through the Southern Great Plains, killing several persons and causing heavy property losses. Severe hail loss occurred in Comanche County, Okla. Thunderstorm activity was general east of the Rocky Mountains except in the extreme north on the 14th and 15th. (Summary Supplied by U. S. Weather Bureau).

CEREAL AND FORAGE INSECTS

ALFALFA WEEVIL (Hypera postica) - UTAH - Adults active in alfalfa 1/4 to 1 1/2 inch tall in Salt Lake and Tooele Counties. Apparently a good survival has occurred. Adults active on 1 inch tall alfalfa at North Ogden (Weber County) March 10. This is unusually early for northern Utah. (Knowlton and Lieberman).

A LEAFHOPPER (Dikraneura carneola) - UTAH - Commonly numerous on taller-growth fall grains in many parts of Tooele and Salt Lake Counties. (G. F. Knowlton).

CUTWORMS (Phalaenidae) - UTAH - Moderate numbers found in alfalfa fields in Salt Lake and Tooele Counties. Evidently a good survival. (G. F. Knowlton).

GREENBUG (Toxoptera graminum) - TENNESSEE - Attacking small grain in local areas in Macon County. (R. P. Mullett).

FRUIT INSECTS

CALIFORNIA RED SCALE (Aonidiella aurantii) - TEXAS - Light to heavy infestations found in citrus groves in Dimmit County. (Dopson).

Citrus Pest Activity in Florida

For the first week in March: PURPLE SCALE (Lepidosaphes beckii) activity continued to increase and further increase expected. Rate of hatching increasing slowly but a high percent of scales on old leaves are still in egg stage. Infestations found in 95 percent of groves checked. FLORIDA RED SCALE (Chrysomphalus aonidum) increased in activity and further increase expected. Sixty percent of groves infested. CITRUS RED MITE (Metatetranychus citri) activity remained unchanged at a high level. Some further increase expected. Numerous reports of mites moving on to new foliage. Sixty-seven percent of groves infested. CITRUS RUST MITE (Phyllocoptruta oleivora) activity at a rather low level. Not much change expected. SIX-SPOTTED MITE (Tetranychus sexmaculatus) infestations are still increasing and mites beginning to move to new growth. APHIDS are found in numerous groves, but not expected to become a serious problem. WHITEFLY adults appearing in many groves. It now appears that peak of new growth will be reached about three weeks earlier than in 1952. (Pratt & Thompson

TRUCK CROP INSECTS

Vegetable Insect Conditions in Lower Rio Grande Valley, Texas area: LEAF MINERS and APHIDS very numerous in the few planted fields of blackeye peas. APHIDS are a serious problem in all cabbage fields. CABBAGE LOOPER (Trichoplusia ni) causing some damage in many cabbage fields. THRIPS causing some damage in a few fields. DARKLING BEETLES are very numerous and destructive in one field of seedling-stage watermelons. (Wene and Griffith).

VEGETABLE WEEVIL (Listroderes costirostris obliquus) - GEORGIA - Heavy damage to turnips by larvae and adults in Jefferson County, March 5. (W. M. Fortson). Larvae causing considerable damage to small cabbage plants in Thomas County, March 9. (F. S. Chamberlin).

APHIDS (Aphidae) - GEORGIA - Light scattered infestations on cabbage in Thomas and adjacent counties, March 9. (F. S. Chamberlin).

SPIDER MITES (Tetranychus bimaculatus and prob. T. atlanticus) - Eastern VIRGINIA - Building up on strawberries. (Brubaker, Greenwood and Hofmaster).

DIAMONDBACK MOTH (Plutella maculipennis) - GEORGIA - Larvae causing slight damage to cabbage in scattered infestations in Thomas and adjacent counties, March 9. (F. S. Chamberlin).

COTTON INSECTS

Cotton Insect Conditions in Lower Rio Grande Valley, Texas: The general over-all insect population has been light; however, all of the major early pests are present in some degree throughout the Valley. Of these pests, CUTWORMS are causing the most damage. THRIPS have been reported from several areas, but infestations are spotted and seem to be causing little damage. Very few reports show damage being done by DARKLING BEETLES. APHIDS have been reported from all sections of the Valley. Some damage to stands has been reported, especially where Alternaria leaf spot and soreshin occur with the aphids. SPIDER MITES have been reported in the area from Santa Rosa to Mercedes to Brownsville and to Rio Hondo; however, none of the infestations reported seem to be causing damage that would warrant control measures. LEAF MINERS, minor pests of cotton in this area, have been reported in several instances, especially where cotton is being grown in close proximity to tomatoes and cantaloupes. (R. D. Griffith).

SUMMARY OF INSECT CONDITIONS - 1952

VERMONT

Reported by H. L. Bailey

Cereal and Forage Insects: EUROPEAN CORN BORER (Pyrausta nubilalis) infestation was very light. Field checks showed borer population about same as 1951. GRASSHOPPERS were less abundant than usual. ARMYWORM (Pseudaletia unipuncta) - First outbreak since 1938. Ten to 15 acres of grassland badly damaged on one farm in Orange County.

Forest Insects: BRUCE SPANWORM (Operophtera bruceata) - Feeding signs of larvae on beech and maple were common in early spring, but wet cold weather apparently restricted amount of damage. Flights of male moths during first 3 weeks of November were heavy enough to cause inquiries from hunters. GYPSY MOTH (Porthetria dispar) - General increase of egg masses apparent in southern part of State. ELM LEAF BEETLE (Galerucella xanthomelaena) spread northward to St. Johnsbury. ELM LACE BUG (Corythucha ulmi) was prevalent at many scattered points throughout the State, and appears to have increased for the past several years. EASTERN TENTCATERPILLAR (Malacosoma americanum) - General infestation in southern and central parts of the State. Egg masses are common. SATIN MOTH (Stilpnotia salicis) - Abundant in Rutland where Carolina poplars were defoliated. Other reports of defoliation in Corinth and Brattleboro.

Miscellaneous Insects: JAPANESE BEETLE (Popillia japonica) infestation remains at about the same level in towns previously infested (mainly in Windham and Windsor Counties). The town of Bennington shows a recent intensive build-up where turf was destroyed. POTATO LEAFHOPPER (Empoasca fabae) appeared unusually abundant on potatoes that had not been treated.

SOUTH CAROLINA

Reported by
W. C. Nettles and M. D. Farrar

Corn Insects: SOUTHERN CORN ROOTWORM (Diabrotica undecimpunctata howardi) damage was less serious than in the past few years. BILLBUG damage in coastal areas seems to have spread and was fully as serious as in the past. CORN EARWORM (Heliothis armigera) damage extensive (about average). Soybean: VELVETBEAN CATERPILLAR (Anticarsia gemmatilis) and CORN EARWORM attacks were serious; but were less intense than in years past. Blue Lupine: LUPINE WEEVIL (Sitona explicita) damaged blue lupine in Allendale County. Moderate damage by the LUPINE STEM BORER (Hylemya sp.) Crimson Clover Insects: WEEVILS (Hypera meles and H. nigrirostris)- Surveysshowed damage in Greenwood and Saluda Counties. TARNISH PLANT BUG (Lygus lineolaris)damaged plants in the Piedmont. Pasture Insects: FALL ARMYWORM (Laphygma frugiperda) damage was heavy to pastures during August and September. WHITE GRUB (larva of green June beetle (Cotinis nitida)) inflicted heavy damage to fescue in all parts of the State. THREE -CORNERED ALFALFA HOPPER (Spissistilus festinus) damage to alfalfa and Ladino clover was rather serious. Extensive damage by ARMYWORMS on Ladino-fescue pastures. (Aug. '52). Stored Grain Pests: RICE WEEVIL (Sitophilus oryza) and ANGOUMOIS GRAIN MOTH (Sitotroga cerealella) were main stored grainpests. They had started building up somewhat after a low point reached during the freezes of 1951; but had not reached the serious outbreaks of the late 1940's.

Fruit Insects: ORIENTAL FRUIT MOTH (Grapholitha molesta) and PLUM CUCULIO (Conotrachelus nenuphar) were no more damaging than usual to peaches. CODLING MOTH (Carpocapsa pomonella) damage to apples was more serious than usual. Infestation of SAN JOSE and FORBES SCALES (Aspidiotus perniciosus and A. forbesi) are on the decrease, and probably reflect control with organic phosphate insecticides. PEACH TREE BORER (Sanninoidea exitiosa) and LESSER PEACH TREE BORER (Synanthedon pictipes) damage was severe.

Vegetable Insects: SEED CORN MAGGOT injury to beans was noticed in many parts of the State. VEGETABLE WEEVIL (Listroderes costirostris obliquus) damage to spring greens and turnips seemed to be on the increase. STINK BUGS and APHIDS were more abundant than usual on watermelons. The extreme hot, dry weather tended to reduce MEXICAN BEAN BEETLE (Epilachna varivestis) damage.

Tobacco Insects: Tobacco growers experienced one of the most serious HORNWORM (Protoparce spp.) outbreaks ever encountered.

Cotton Insects: BOLL WEEVIL (Anthonomus grandis) was not the main limiting factor. SPIDER MITES were much less damaging than was expected with the hot, dry weather. While BOLLWORMS (Heliothis spp. and others) were not as serious as in past years, their damage amounted to millions of dollars. SEED-CORN MAGGOT (Hylemya cilicrura) damaged seedling cotton in the Piedmont Area.

Insects Affecting Man and Animals: HOUSE FLIES and HORN FLIES were more abundant than usual. It is not thought that resistance to insecticides was a factor with the HORN FLY (Siphona irritans); but resistence is a factor with HOUSE FLIES. SCREWWORM (Callitroga americana) was a minor factor during the year.

Termites: Reports of TERMITE damage to homes seems to be on the increase. Such is to be expected following the increase in building immediately after World War II.

NOTE - The DELAWARE summary carried in Volume 3, No. 11 should have been credited to L. A. Stearns and H. E. Milliron.

STATUS OF THE YELLOW-MARGINED LEAF BEETLE

The yellow-margined leaf beetle (Microtheca ochroloma) reported as a serious pest of crucifers in Argentina and Uruguary, was collected on young cabbage plants at Springhill, Alabama in 1947 1/. Following the discovery of this pest a survey revealed a general infestation throughout most of Mobile County and light, spotted infestations in Baldwin County, Alabama.

Reports received during 1952 show that this beetle has spread into central areas of Alabama, infests three southeastern counties in Mississippi, and is now present in at least one county in extreme northwestern Florida. As of December 1952, the known distribution of yellow-margined leaf beetle in the United States was in the following areas: Autauga, Baldwin, Clarke, Mobile, Monroe and Lee Counties, Alabama; Escambia County, Florida; and George, Green and Jackson Counties, Mississippi.

Observations on the insect in the Mobile, Alabama area show that it can be very devastating to turnips, which appear to be the preferred food plant. Occasional heavy infestations occur on mustard, radish, cabbage, and collards. The insect has also been observed feeding in considerable numbers on wild plants of the primrose family.

Injury is caused by the feeding of the larvae and the adults. The pupae are commonly found above ground attached to leaves, twigs, or other debris. The beetles are active mainly during the winter and early spring months in the Mobile area. A few adults and occasional larvae have been observed feeding during November, but the heaviest populations have been noted later in the season. Infestations decrease during June and limited observations indicate that the species estivates in clumps of weeds during the hot summer months in this area.

1 / Chamberlin, F. S. and H. H. Tippins. 1949.
Microtheca ochroloma, an Introduced Pest of Crucifers, Found in Alabama. Jour. Econ. Ent. 41 (6) : 979.

The yellow-margined leaf beetle is rather easily identified as it differs in size, color, and sculpture from any known species native in the United States. The adult is approximately 0.2 of an inch long and half as wide, with a black head and brown wing covers. There is a conspicuous pale-yellow or white border surrounding the wing covers, on each of which are four rows of deep pits or punctures.

Limited observations indicate that the adult and larval stages of this insect pest may be controlled with applications of rotenone and with DDT.

From the present knowledge of this insect it may be expected to spread over the southern section of the United States where hardy crucifers are grown during the winter months. (K. S. Rohwer, F. E Guyton and F. S. Chamberlin).

GRASSHOPPER OUTLOOK FOR 1953

Cropland Grasshoppers: No widespread serious infestations are expected to threaten crops in 1953 (see map). Several areas will have local, but serious problems. This type of trouble is expected to occur in central South Dakota, northeastern Wisconsin, panhandle of Texas, and central Utah. If the weather remains dry in southern Illinois, Indiana, and Ohio, some trouble is expected during the summer. Cropland in Idaho, Washington, and California, could be invaded by grasshoppers breeding in the surrounding land. These invasions have become even more probable with a build up of Melanoplus mexicanus in all the above states except California. In California, the principal grasshopper is Melanoplus devastator. Recent surveys for eggs of this species indicate some reduction in the infestation expected for 1953.

Range Land Grasshopper: The infestation in northeastern New Mexico, is the largest and most serious trouble area expected next year. This infestation extends into Oklahoma, Colorado, and Texas. The states of Montana, Idaho, Washington, Oregon, Nevada, and Utah, will have severe range infestations, but not involving so much area as the New Mexico problem. An unusual range infestation is expected in North Dakota. It is different in that the species involved are those that overwinter as nymphs. California, and Arizona, have only small local range infestations remaining to threaten their range. The infestation involving range lands south of the Seligman area treated in 1952, remains a threat. Ranchers concerned may request public assistance from Arizona, and the Federal government to control these grasshoppers during 1953.

MORMON CRICKET OUTLOOK FOR 1953

Optimum conditions for survival and development of Mormon crickets prevailed throughout the intermountain region during 1952. Substantial build-ups occurred in many of the historic cricket areas. Despite extensive and successful control efforts in 1952, heavy Mormon cricket infestations are expected in the northern half of Nevada, and in Tooele

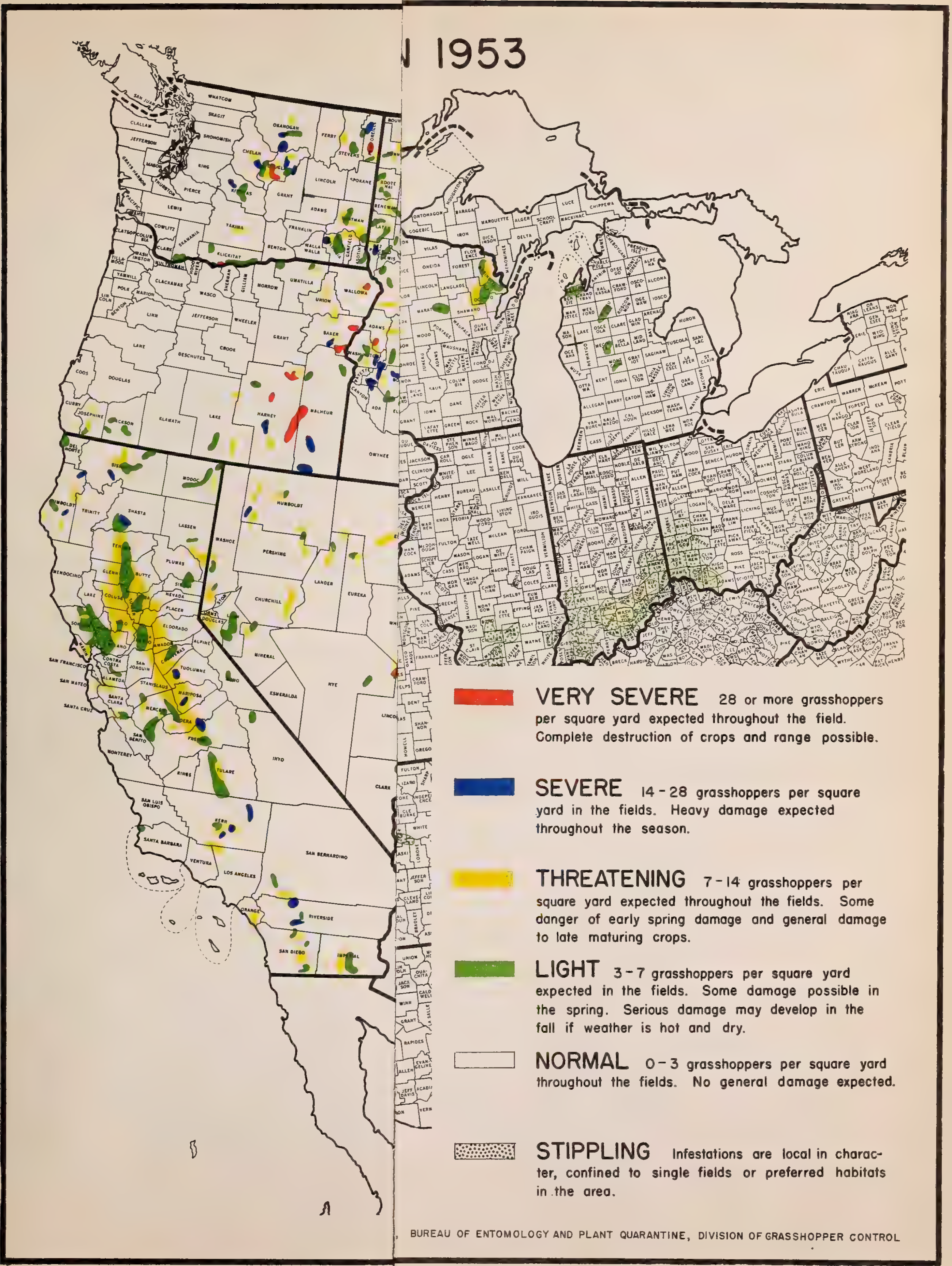
County Utah, during 1953 (see map). Smaller, but heavy infestations are expected in Idaho, Oregon, California, Montana, Colorado, Wyoming. The existing infestations are vigorous and indicate a strong tendency to continue a full scale build-up similar to that experienced during the 30's. Cooperators recognize the danger, and are planning to participate in any control undertaken in 1953.

CHINCH BUG OUTLOOK FOR 1953

The number of chinch bugs going into hibernation during the fall of 1952 (see map) was greater in some states than in the past several years. This was particularly true in Oklahoma, Arkansas, Missouri, and Illinois. Fewer bugs were recorded in Kansas, Nebraska, and Iowa, than last year. Indiana remained about the same as in 1951. If the spring and early summer should be warm and dry in those states showing an increase, this pest is expected to cause trouble, and may need attention in 1953. Little or no trouble is expected in the other states except Indiana, where local infestations may do some damage.

(Reports by L. G. K. Iverson and J. R. Dutton)

N 1953



🟥 **VERY SEVERE** 28 or more grasshoppers per square yard expected throughout the field. Complete destruction of crops and range possible.

🟦 **SEVERE** 14 - 28 grasshoppers per square yard in the fields. Heavy damage expected throughout the season.

🟨 **THREATENING** 7 - 14 grasshoppers per square yard expected throughout the fields. Some danger of early spring damage and general damage to late maturing crops.

🟩 **LIGHT** 3 - 7 grasshoppers per square yard expected in the fields. Some damage possible in the spring. Serious damage may develop in the fall if weather is hot and dry.

☐ **NORMAL** 0 - 3 grasshoppers per square yard throughout the fields. No general damage expected.

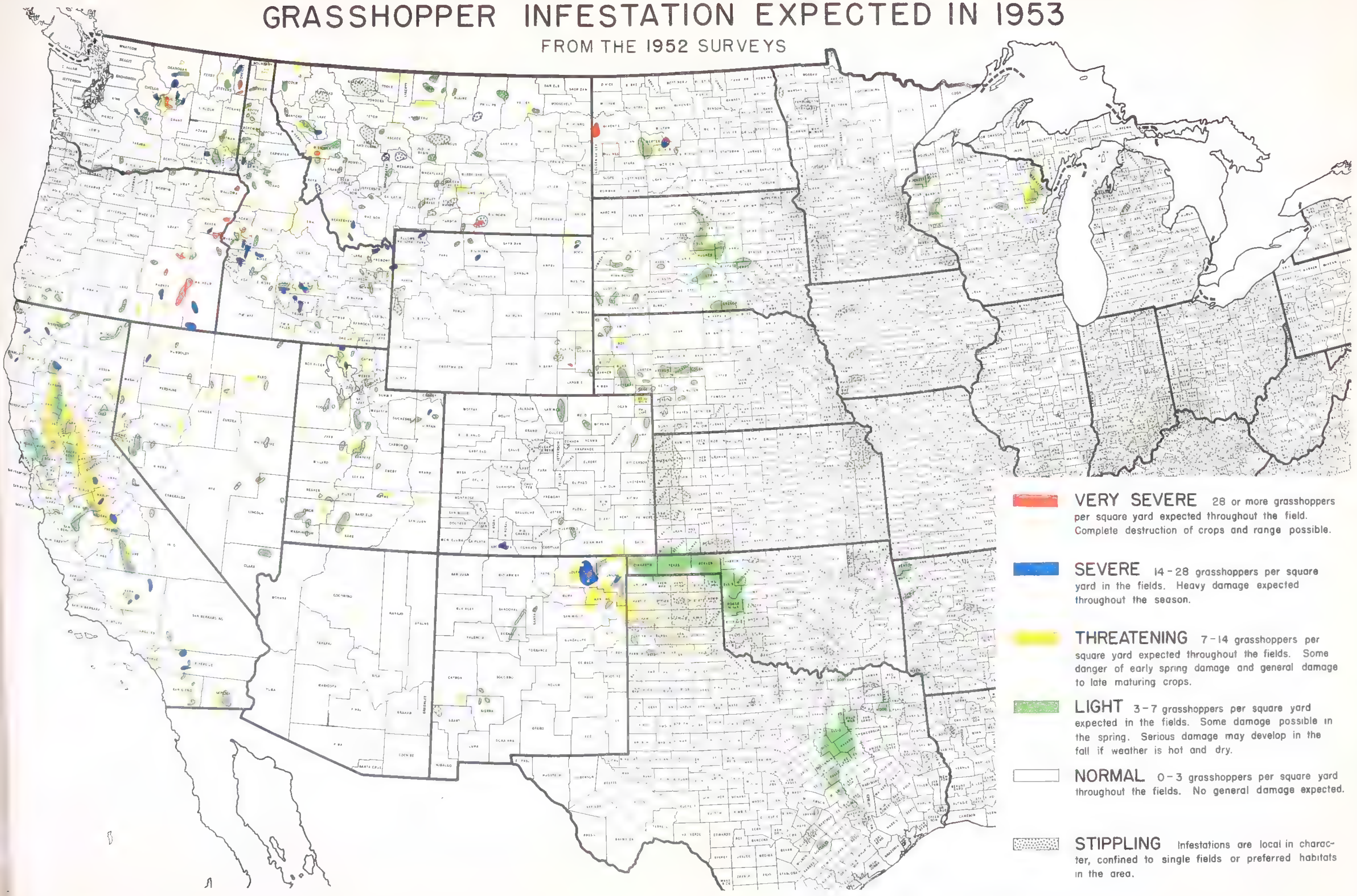
▨ **STIPPLING** Infestations are local in character, confined to single fields or preferred habitats in the area.

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE, DIVISION OF GRASSHOPPER CONTROL

GPO 82-9000755

GRASSHOPPER INFESTATION EXPECTED IN 1953

FROM THE 1952 SURVEYS



🟥 **VERY SEVERE** 28 or more grasshoppers per square yard expected throughout the field. Complete destruction of crops and range possible.

🟦 **SEVERE** 14 - 28 grasshoppers per square yard in the fields. Heavy damage expected throughout the season.

🟨 **THREATENING** 7 - 14 grasshoppers per square yard expected throughout the fields. Some danger of early spring damage and general damage to late maturing crops.

🟩 **LIGHT** 3 - 7 grasshoppers per square yard expected in the fields. Some damage possible in the spring. Serious damage may develop in the fall if weather is hot and dry.

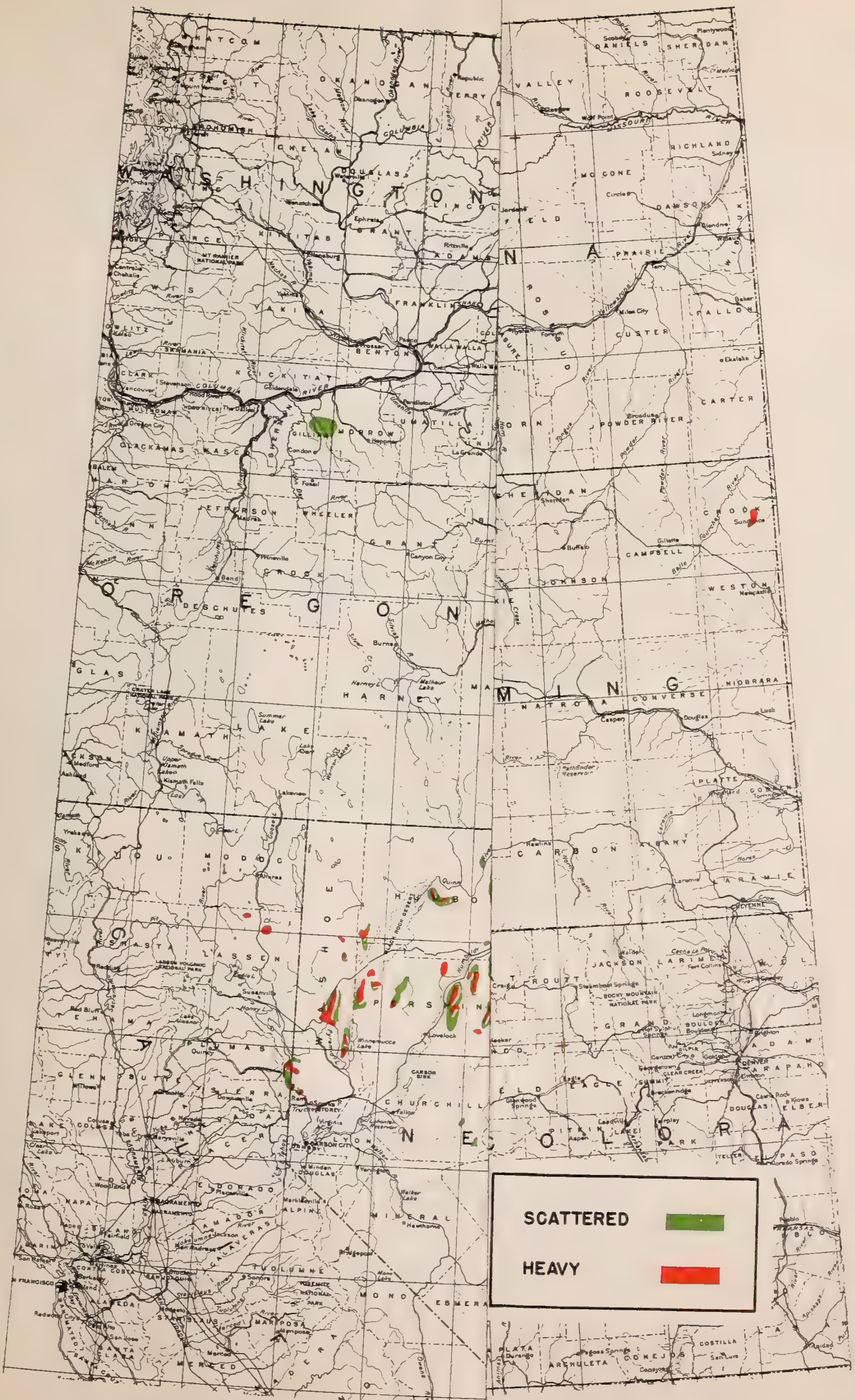
☐ **NORMAL** 0 - 3 grasshoppers per square yard throughout the fields. No general damage expected.

▨ **STIPPLING** Infestations are local in character, confined to single fields or preferred habitats in the area.

UNITED STATES DEPARTMENT OF AGRICULTURE, BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE, DIVISION OF GRASSHOPPER CONTROL
DENVER, COLORADO, JANUARY 2, 1953

GPO 82-9000755

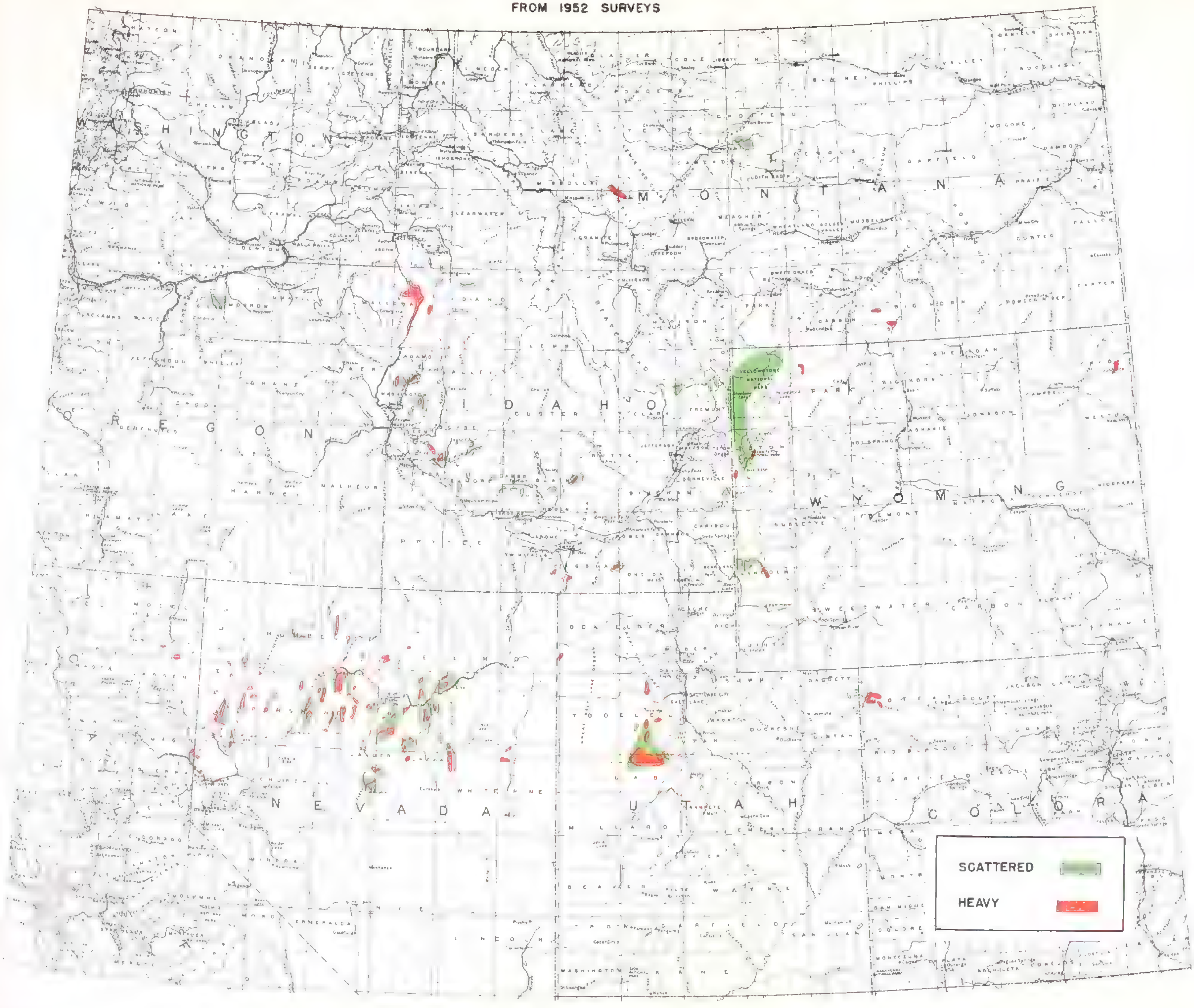
MORM



GPO 82-9000755

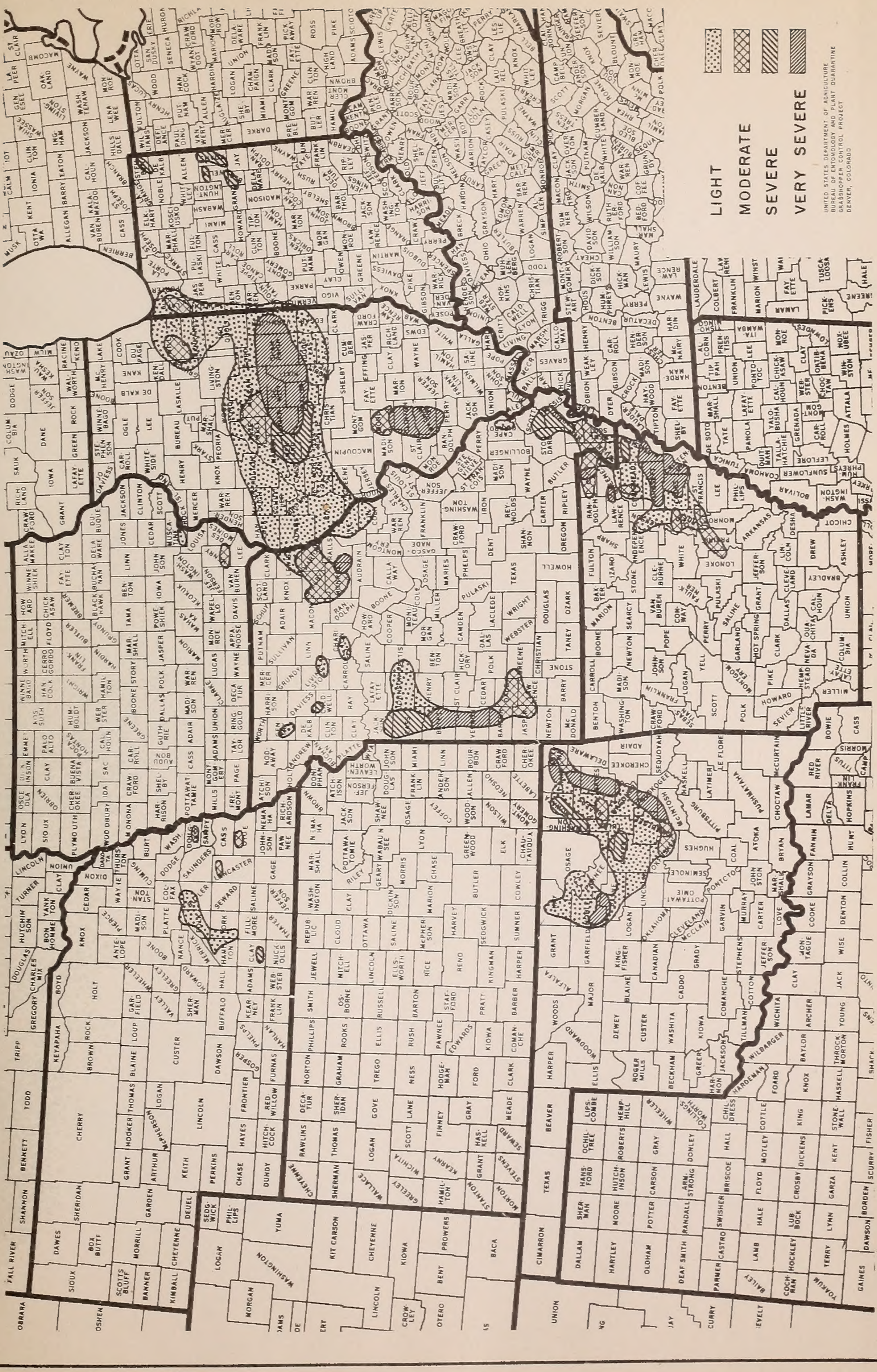
MORMON CRICKET INFESTATION EXPECTED IN 1953

FROM 1952 SURVEYS



GPO 82-9000755

CHINCH BUG INFESTATION IN FALL OF 1952



UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
GRASSHOPPER CONTROL PROJECT
DENVER, COLORADO